

### UNIVERSITY OF CALIFORNIA

Date: 03/26/21

# CERTIFICATE OF SEISMIC PERFORMANCE RATING

[X] UC-Designed & Constructed Facility

[] Campus-Acquired or Leased Facility

#### **BUILDING DATA**

Building Name: Parking Structure 32 Address: 1070 Veteran Avenue, 90024 Site location coordinates: Latitude 34.060014 Longitudinal -118.447755

### UCOP SEISMIC PERFORMANCE RATING (OR "RATING"): IV

ASCE 41-17 Model Building Type:

- a. Longitudinal Direction: C2 and C2a: Reinforced concrete shear walls
- b. Transverse Direction: C2 and C2a: Reinforced concrete shear walls

Gross Square Footage: Number of stories *above* grade: 4 Number of basement stories *below* grade: 1

Year Original Building was Constructed: 1986 Original Building Design Code & Year: UBC-1982 Retrofit Building Design Code & Code (if applicable): , CBC-1998

#### SITE INFORMATION

Site Class: D	Basis: N/A, N/A, N/A	١
Geologic Hazards:		
Fault Rupture: No	Basis: CGS Maps	
Liquefaction: No	Basis: CGS Maps	
Landslide: No	Basis: CGS Maps	

# ATTACHMENT

Original Structural Drawings: General Notes, Conrad Associates, 10/15/1986, S-1 or Seismic Evaluation: N/A Retrofit Structural Drawings: General Notes, Englekirk & Sabol, 10/11/2002, S0.1

#### COMMENTS

Partial subterranean level. Comprehensive seismic upgrade per then current UCLA policy to III, but ground motions are not listed so it isn't clear that the building would statisfy BSE-1N and BSE-2N. For this reason, the rating is set as IV.



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#### **CERTIFICATION & PRESUMPTIVE RATING VERIFICATION STATEMENT**

I, Thomas A. Sabol, a California-licensed structural engineer, am responsible for the completion of this certificate, and I have no ownership interest in the property identified above. My scope of review to support the completion of this certificate included both of the following ("No" responses must include an explanation):

- a) the review of structural drawings indicating that they are as-built or record drawings, or that they otherwise are the basis for the construction of the building: ☑ Yes □ No
- b) visiting the building to verify the observable existing conditions are reasonably consistent with those shown on the structural drawings: ☑ Yes □ No

Based on my review, I have verified that the UCOP Seismic Performance Rating is presumptively permitted by the following UC Seismic Program provision (choose one of the following):

- Contract documents indicate that the original design and construction of the aforementioned building is in accordance with the benchmark design code year (or later) building code seismic design provisions for UBC or IBC listed in the Benchmark Building Codes and Standards table below.
- [] 2) The existing rating is based on an acceptable basis of seismic evaluation completed in 2006 or later.
- [X] 3) Contract documents indicate that a comprehensive<sup>12</sup> building seismic retrofit design was fullyconstructed with an engineered design based on the 1997 UBC/1998 or later CBC, and (choose one of the following):
  - [X] the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1E (or BSE-R) and BSE-2E (or BSE-C) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 CBC or later for EXISTING buildings, and is presumptively assigned a rating of IV.
  - [] the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1 (or BSE-1N) and BSE-2 (or BSE-2N) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 or *later* CBC for NEW buildings, and is presumptively assigned a rating of III.
  - [] the retrofit project was not completed by the UC campus following UC policies, and is presumptively assigned a rating of IV.

<sup>&</sup>lt;sup>12</sup> A comprehensive retrofit addresses the entire building structural system as indicated by the associated seismic evaluation, as opposed to addressing selective portions of the structural system.

This certificate is to be used in connection with the UC Facilities Manual, UC Seismic Program Guidelines.



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AFFIX SEAL HERE

#### **CERTIFICATION SIGNATURE**

Thomas A. Sabol Print Name Principal

Title

SE 3175 CA Professional Registration No. 3/31/2023 License Expiration Date - PROFESSIONAL NDREW SUSSE SUSSE NOLL SE 3175 F

h. Anbol Signature

03/26/21 Date

Englekirk Institutional (323) 733-6673 888 S. Figueroa Street, 18<sup>th</sup> Floor, Los Angeles, CA 90017 Firm Name, Phone Number, and Address



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#### **Benchmark Building Codes and Standards**

	Building Seismic	Building Seismic Design Provisions	
Building Type <sup>a, b, j</sup>	UBC	IBC	
Wood frame, wood shear panels (Types W1 and W2)	1976	2000	
Wood frame, wood shear panels (Type W1a) <sup>/</sup>	1976 <sup>j</sup>	2000	
Steel moment-resisting frame (Types S1 and S1a) <sup>/</sup>	1997 <sup>j</sup>	2000	
Steel concentrically braced frame (Types S2 and S2a)	1997	2000	
Steel eccentrically braced frame (Types S2 and S2a)	1988 <sup><i>g</i></sup>	2000	
Buckling-restrained braced frame (Types S2 and S2a)	f	2006	
Metal building frames (Type S3)	f	2000	
Steel frame with concrete shear walls (Type S4)	1994	2000	
Steel frame with URM infill (Types S5 and S5a)	f	2000	
Steel plate shear wall (Type S6)	f	2006	
Cold-formed steel light-frame construction—shear wall system (Type CFS1)	1997 <sup><i>h</i></sup>	2000	
Cold-formed steel light-frame construction—strap-braced wall system (Type CFS2)	f	2003	
Reinforced concrete moment-resisting frame (Type C1)	1994	2000	
Reinforced concrete shear walls (Types C2 and C2a)	1994	2000	
Concrete frame with URM infill (Types C3 and C3a) <sup>/</sup>	f	f, j	
Tilt-up concrete (Types PC1 and PC1a)	1997	2000	
Precast concrete frame (Types PC2 and PC2a)	f	2000	
Reinforced masonry (Type RM1)	1997	2000	
Reinforced masonry (Type RM2)	1994	2000	
Unreinforced masonry (Type URM) <sup>j</sup>	f	f, j	
Unreinforced masonry (Type URMa) <sup>j</sup>	f	f, j	
Seismic isolation or passive dissipation	1991	2000	

Note: This table has been adapted from ASCE 41-17 Table 3-2. Benchmark Building Codes and Standards for Life Safety Structural Performed at BSE-1E. Note: UBC = Uniform Building Code

Note: IBC = International Building Code

a Building type refers to one of the common building types defined in Table 3-1 of ASCE 41-17.

b Buildings on hillside sites shall not be considered Benchmark Buildings.

c not used

d not used

e not used

f No benchmark year; buildings shall be evaluated in accordance with the UC Seismic Safety Policy and the UC Seismic Program Guidelines.

g Steel eccentrically braced frames with links adjacent to columns shall comply with the 1994 UBC Emergency Provisions, published September/October 1994, or subsequent requirements.

h Cold-formed steel shear walls with wood structural panels only.

i Flat slab concrete moment frames shall not be considered Benchmark Buildings.

j Shaded cells are intentionally modified from ASCE 41-17 Table 3-2.